

CLAIMS:

1. A raw garbage treatment apparatus which treats raw garbage to dispose while cutting the raw garbage, the apparatus comprising:

a substantially cylindrical treatment tank with a bottom thereof closed,  
a rotating shaft provided to rise from a center of the bottom plate of said treatment tank,

a motor which is provided beneath said treatment tank and rotates said rotating shaft,

a plurality of rotating blades each of which has cutting vanes that radially extend outward with said rotating shaft as a center, said rotating blades being fastened to said rotating shaft at intervals from each other in an axial direction of said rotating shaft,

a plurality of fixed blades through which said rotating shaft rotatably passes and which form a main cutter together with said rotating blades, and

a supporting frame which has vertical plates that hold outer ends of said fixed blades, an upper end of said supporting frame being fastened to an inner upper portion of the treatment tank.

2. The raw garbage treatment apparatus according to Claim 1, wherein

said rotating shaft is detachable from an output shaft of the motor, and

an upper portion of said rotating shaft is held by a top plate that is fastened to the supporting frame.

3. The raw garbage treatment apparatus according to Claim 1 or 2, further comprising:

a rotating base which is fastened to said rotating shaft in close proximity to said bottom plate of the treatment tank, at least a portion of an outer circumference of said rotating base radially protruding further outward than the vertical plates of said supporting frame, and

an inclined plate fastened to said rotating base, said inclined plate being provided on an outside of said vertical plates and inclined so as to become gradually higher outwardly so as to be used for upward and downward agitation of said raw garbage.

4. The raw garbage treatment apparatus according to Claim 3, further comprising an arm member fastened to said rotating base and formed in, when seen in a plan view, a

substantially circular arc shape so that one end said arm member is closer to said vertical plates of said supporting frame than another end thereof with respect to a direction opposite from a rotational direction of said rotating shaft.

5. The raw garbage treatment apparatus according to Claim 3 or 4, further comprising a fixed base which is fastened to said bottom plate in close proximity to an undersurface of said rotating base, thus forming a lower cutter together with said rotating base, said fixed base having projections projecting outwardly.

6. The raw garbage treatment apparatus according to any of Claims 3 through 5, wherein

an upper rotating blade that radially extends outward from the rotating shaft is provided on an upper end of said rotating shaft, and

said upper rotating blade forms an upper cutter together with said supporting frame and an upper fixed blade which is held by the supporting frame.

7. The raw garbage treatment apparatus according to any of Claims 1 through 6, further comprising a heating means provided at a lower portion of the treatment tank.

8. The raw garbage treatment apparatus according to any of Claims 1 through 7, further comprising a ventilation means provided at a higher portion of the treatment tank.

9. A cutter used in treating raw garbage for cutting and pulverizing raw garbage, comprising:

a rotating shaft which is provided in a vertical attitude and is rotationally driven by an electric motor,

a plurality of rotating blades each of which has cutting vanes that radially extend outward with said rotating shaft as a center, said rotating blades being fastened to said rotating shaft at intervals from each other in an axial direction of said rotating shaft,

a supporting frame which has vertical plates that are provided outside of outer ends of said plurality of rotating blades in a radial direction about said rotating shaft so as to refrain from touching said plurality of rotating blades, and

a plurality of fixed blades each of which has cutting vanes that radially extend outward with tip ends thereof being held on said vertical plates, said rotating shaft rotatably passing through said fixed blades.